



State of Utah

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Environmental Quality

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Site ID: 12519

Title V Operating Permit

PERMIT NUMBER: 4500076001

DATE OF PERMIT: February 13, 2004

Date of Last Revision: May 25, 2007

This Operating Permit is issued to, and applies to the following:

Name of Permittee:

Desert Power LP
2603 Augusta Dr.
Suite 880
Houston, TX 77057

Permitted Location:

Desert Power Plant
Rowley
Rowley, UT

UTM coordinates: 4,530,380 meters Northing, 353,932 meters Easting
SIC code: 4911

ABSTRACT

Desert Power L.P. is a natural gas-fired electric generating plant consisting of two units. Both units are GE Frame 6 gas turbine/generator with lean premixed low NO_x burner and inlet chilling, each rated at 35.9 MW power output and 464 MM BTU/hr heat input. The plant is located in Tooele County which is an attainment area with the National Ambient Air Quality Standards (NAAQS). Both turbines are subject to New Source Performance Standards (NSPS) Subparts A and GG, and the auxiliary boiler is subject to NSPS Subparts A and Dc. The plant is also a Phase II Acid Rain source and a major source of NO_x and CO.

UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

Jennifer He

Operating Permit History

2/13/2004 - Permit issued	Action initiated by an initial operating permit application	
8/10/2004 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of AO DAQE-AN25190005-04, for modification the testing frequency for two turbines
12/16/2004 -Permit modified	Action initiated by a significant operating permit modification	to include the amendments (published on July 8, 2004) to NSPS Subpart GG in the permit
05/25/2007 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	To incorporate three AOs issued on June 1, 2005, April 25, 2006, and August 20, 2006 for adding the combined cycle operations and diesel-fired emergency turbine generator.

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Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

Section I: General Provisions

I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

I.C. Duty to Comply.

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

I.D. Permit Expiration and Renewal.

I.D.1 This permit is issued for a fixed term of five years and expires on February 13, 2009.
(R307-415-6a(2))

I.D.2 Application for renewal of this permit is due by August 13, 2008. An application may be submitted early for any reason. (R307-415-5a(1)(c))

I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

I.G. Permit Fee.

I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

I.J. Inspection and Entry.

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))
- I.K. **Certification.**
- Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)
- I.L. **Compliance Certification.**
- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **February 12, 2005** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was

continuous or intermittent. The certification shall be based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice
(mail code 8ENF)
EPA, Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

I.M. Permit Shield.

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

I.N. Emergency Provision.

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate

corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O. **Operational Flexibility.**
- Operational flexibility is governed by R307-415-7d(1).
- I.P. **Off-permit Changes.**
- Off-permit changes are governed by R307-415-7d(2).
- I.Q. **Administrative Permit Amendments.**
- Administrative permit amendments are governed by R307-415-7e.
- I.R. **Permit Modifications.**
- Permit modifications are governed by R307-415-7f.
- I.S. **Records and Reporting.**
- I.S.1 Records.

- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
- I.S.3 Notification Addresses.
- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Phone: 801-536-4000

- I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII
Office of Enforcement, Compliance and
Environmental Justice (mail code 8ENF)
1595 Wynkoop Street
Denver, CO 80202-1129

For reports, notifications, or other correspondence
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII
Office of Partnerships & Regulatory Assistance
Air & Radiation Program (mail code 8P-AR)
1595 Wynkoop Street
Denver, CO 80202-1129
Phone: 303-312-6440

I.T. Reopening for Cause.

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the Acid Rain Program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into this permit. (R307-415-7g(1)(b)) To be deleted unless a Title IV source.

I.T.3 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

I.U. Inventory Requirements.

Emission inventories shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

I.V. Title IV and Other, More Stringent Requirements

Where an applicable requirement is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, Acid Deposition Control, both provisions shall be incorporated into this permit. (R307-415-6a(1)(b))

Section II: SPECIAL PROVISIONS

II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 Gas Turbine/Generator Unit 1 (designated as Emission unit #1)

Unit Description: GE Frame 6 gas turbine/generator unit with lean premixed low NO_x burner and inlet chilling, rated at 35.9 MW power output and 464 MM BTU/hr heat input. NSPS Subpart GG.

II.A.2 Gas Turbine/Generator Unit 2 (designated as Emission unit #2)

Unit Description: GE Frame 6 gas turbine/generator unit with lean premixed low NO_x burner and inlet chilling, rated at 35.9 MW power output and 464 MM BTU/hr heat input. NSPS Subpart GG.

II.A.3 Gas Turbine/Generator group (designated as Emission unit #3)

Unit Description: Includes Emission Units #1 & #2.

II.A.4 Heat Recovery Steam Generator (HRSG) Main Stack (designated as Emission unit #4)

Unit Description: Emissions from both gas turbines will route through the HRSG unit and exit through the single HRSG stack. No unit-specific applicable requirements.

II.A.5 Auxiliary Boiler (designated as Emission unit #5)

Unit Description: Auxiliary boiler rated at 29.8 MM Btu/hr. NSPS Dc.

II.A.6 Emergency Fire Pump (designated as Emission unit #6)

Unit Description: Diesel-fired emergency fire pump rated at 270 hp.

II.A.7 Cold Solvent Parts Washer (designated as Emission unit #7)

Unit Description: Miscellaneous cold solvent parts washer.

II.A.8 Emergency Turbine Generator (designated as Emission unit #8)

Unit Description: one Saturn 20-1501 diesel-fired emergency turbine generator.

II.B. Requirements and limitations.

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

II.B.1 Conditions on permitted source (Source-wide)

II.B.1.a Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-8(2) and 40 CFR 60.11(d); condition originated in DAQE-AN2519009-06]

II.B.1.a.1 Monitoring:

Records required for this permit condition will serve as monitoring.

- II.B.1.a.2 **Recordkeeping:**
- Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.1.a.3 **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.B.1.b **Condition:**
- Visible emissions shall be no greater than 10 percent opacity from any stationary point associated with the source or with the control facilities. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN2519009-06]
- II.B.1.b.1 **Monitoring:**
- For emission units using pipeline-quality natural gas as fuel, in lieu of opacity monitoring, the report required for this permit condition will serve as monitoring. For diesel-fired emergency fire pump, opacity determinations shall be conducted annually in accordance with 40 CFR 60, Appendix A, Method 9.
- II.B.1.b.2 **Recordkeeping:**
- The results of monitoring and the annual certification required for this permit condition shall be maintained as described in Provision I.S.1 of the permit
- II.B.1.b.3 **Reporting:**
- In addition to the reporting requirements specified in Section I of this permit, the permittee should certify each annual certification report that only pipeline quality natural gas is used as fuel in the turbine units and auxiliary boiler during the reporting year.
- II.B.1.c **Condition:**
- The permittee shall use only pipeline-quality natural gas as fuel in the turbine units and auxiliary boiler. Number 1 and 2 diesel shall be used as fuel for the fire pump and emergency generator. [Authority granted under R307-401-8(1)(a)(BACT); condition originated in DAQE-AN2519009-06]
- II.B.1.c.1 **Monitoring:**
- In lieu of fuel monitoring, the report required for this permit condition will serve as monitoring.
- II.B.1.c.2 **Recordkeeping:**
- The annual certification required for this permit condition shall be maintained as described in Provision I.S.1 of the permit
- II.B.1.c.3 **Reporting:**
- In addition to the reporting requirements specified in Section I of this permit, the permittee should certify with each annual certification report that fuel usages in each affected unit compliance with the permit condition during the reporting year.
- II.B.2 **Conditions on Gas Turbine/Generator group (Emission unit #3)**

II.B.2.a

Condition:

Emissions of NO_x shall be no greater than 14.75 ppm_{dv} @ 15% O₂ from each gas turbine and 50.0 lb/hr from two gas turbines combined. [Authority granted under R307-401-8(1)(a) [BACT] & 40 CFR 60 Subpart GG; condition originated in DAQE-AN2519009-06]

II.B.2.a.1

Monitoring:

1. Stack testing shall be performed as specified here:

(a) Frequency. Each gas turbine generator shall be tested once every two years on a rotating basis, such that one gas turbine is tested per year and within a two-year cycle both gas turbines are tested. In addition, emissions shall be tested at any other time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Sample Point. Emission shall be measured at the combustion turbine duct port during combined cycle operation or by pass stacks during simple cycle operation. The emission sample point shall conform to the requirements of 40 CFR 60, Appendix A, Method 20. In addition, Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(d) 40 CFR 60, Appendix A, Method 20 shall be used to determine the nitrogen oxides and oxygen concentrations.

(e) Test Conditions. All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated. During the tests, the source shall burn fuels or combustion of fuels, use raw materials, and maintain process conditions representative of normal operations, and shall operate under such other relevant conditions as the Executive Secretary shall specify.

(2). The permittee shall continuously monitor the appropriate parameters to determine whether the affected unit is operating in the lean premixed (low-NO_x) combustion mode. These parameters may include percentage of full load, turbine exhaust temperature, combustion reference temperature, compressor discharge pressure, fuel and air valve positions, dynamic pressure pulsations, internal guide vane (IGV) position, and flame detection or flame scanner condition. The acceptable values and ranges for all parameters monitored shall be specified in the monitoring plan required under 40 CFR 75.19 for the unit, and parameters shall be monitored during each subsequent operating hour.

II.B.2.a.2

Recordkeeping:

Results of all stack testing and combustion parameters monitoring shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. The permittee shall keep all the records that include the name of all parameters monitored, the acceptable values and

ranges for all parameters, and the values of all parameters. Additionally, the permittee shall keep records indicating whether the unit is operating in the premix mode for each given operating hour.

II.B.2.a.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. The permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c). An excess emission shall be any 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit. A period of monitor downtime shall be any unit operating hour in which any of the required parametric data are either not recorded or are invalid. (origin: 40 CFR 60.334(j)(1)(iv))

II.B.2.b

Condition:

Emissions of CO shall be no greater than 25 ppm_{dv} @ 15% O₂ from each gas turbine and 51.6 lbs/hr from two gas turbines combined. [Authority granted under R307-401-8(1)(a) [BACT]; condition originated in DAQE-AN2519009-06]

II.B.2.b.1

Monitoring:

Stack testing shall be performed as specified below:

(a) Frequency. Each gas turbine generator shall be tested once every two years on a rotating basis, such that one gas turbine is tested per year and within a two-year cycle both gas turbines are tested. In addition, emissions shall be tested at any other time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

(c) Sample Location: Emission shall be measured at the combustion turbine duct port during combined cycle operation or by pass stacks during simple cycle operation. The emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 20, and Occupational Safety and Health Administration (OSHA) approved access shall be provided to the test location.

(d) 40 CFR 60, Appendix A, Method 10 shall be used to determine the pollutant emission rate.

(e) Test Conditions. All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated. During the tests, the source shall burn fuels or combustion of fuels, use raw materials, and maintain process conditions representative of normal operations, and shall operate under such other relevant conditions as the Executive Secretary shall specify.

II.B.2.b.2

Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

II.B.2.b.3

Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

Condition:

Hours of operation shall be no greater than 8,110 hours per rolling 12-month period from each affected unit. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN2519009-06]

II.B.2.c.1

Monitoring:

Operating hours shall be recorded using a meter or operations log. Hours shall be recorded at least once a day when the equipment operates. Monthly hours of operation shall be determined within the first 20 calendar days of each month, for the previous month, using operations logs or records. The total shall then be added to the previous 11 months total for a 12-month rolling total.

II.B.2.c.2

Recordkeeping:

A log recording all hours of operation for each emission unit shall be maintained. The log shall include the results of required monitoring.

II.B.2.c.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.d

Condition:

Sulfur content of any fuel burned shall be no greater than 0.8 percent by weight from each affected unit. [Authority granted under 40 CFR 60 Subpart GG; condition originated in 40 CFR 60.333(b)]

II.B.2.d.1

Monitoring:

In lieu of monitoring the total sulfur content of gaseous fuel combusted in the turbines, the permittee should use one of the following sources of information to demonstrate that the gaseous fuel meets the definition of natural gas in 40 CFR 60.331(u):

- (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 is required.

II.B.2.d.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.2.d.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.3

Conditions on Auxiliary Boiler (Emission unit #5)

II.B.3.a

Condition:

The permittee shall maintain records of the amount of each fuel combusted during each calendar month for each affected emission unit. [Authority granted under 40 CFR 60.48c(g); condition originated in 40 CFR 60.48c(g)]

II.B.3.a.1

Monitoring:

Fuel consumption for each affected emission unit shall be determined by a fuel meter, vendor supplied information, or other method approved by the Executive Secretary.

II.B.3.a.2

Recordkeeping:

Records of the amounts of each fuel combusted during each month for each affected unit shall be maintained as described in Provision I.S.1 of this permit.

II.B.3.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4

Conditions on Emergency Fire Pump (Emission unit #6)

II.B.4.a

Condition:

The diesel-fired fire pump shall only be operated during emergency events, or for regular training, testing or maintenance purpose, which shall not exceed 10 hours per month. Operation during other periods must be reviewed and approved in accordance with UAC R307-401-1. [Authority granted under R307-401-8(1)(a) (BACT); condition originated in DAQE-AN2519009-06]

II.B.4.a.1

Monitoring:

An operation log shall be used to record the following information for each usage: date(s), total hours used, and reason for usage.

II.B.4.a.2

Recordkeeping:

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.a.3

Reporting:

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.5

Conditions on Emergency Turbine Generator (Emission unit #8)

- II.B.5.a **Condition:**
- The diesel-fired fire emergency generator shall only be operated during emergency events, or for regular training, testing or maintenance purpose, which shall not exceed 10 hours per month. Operation during other periods must be reviewed and approved in accordance with UAC R307-401-1. [Authority granted under R307-401-8(1)(a)(BACT); condition originated in DAQE-AN2519009-06]
- II.B.5.a.1 **Monitoring:**
- An operation log shall be used to record the following information for each usage: date(s), total hours used, and reason for usage.
- II.B.5.a.2 **Recordkeeping:**
- Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.
- II.B.5.a.3 **Reporting:**
- There are no reporting requirements for this provision except those specified in Section I of this permit.
- II.C. **Emissions Trading.**
- (R307-415-6a(10))
- Not applicable to this source.
- II.D. **Alternative Operating Scenarios.**
- (R307-415-6a(9))
- Not applicable to this source.
- II.E. **Source-specific Definitions.**
- Not applicable to this source.

Section III: PERMIT SHIELD

The following requirements have been determined to be not applicable to this source in accordance with Provision I.M, Permit Shield:

- III.A. **R307-170 (Continuous Emissions Monitoring Systems Program)**
- This regulation is not applicable to the Gas Turbine/Generator group (Emission unit # 3) because these units are Low Mass Emission (LME) units under 40 CFR 75.19. EPA made the LME determination in a letter dated January 28, 2003.
- III.B. **40 CFR, Part 60, Subparts K, Ka, Kb (NSPS/ Volatile Organic Liquid Storage Vessels)**
- This regulation is not applicable to the permitted source (Source-wide) because there are no oil storage tanks at the plant.

III.C. **40 CFR 74 (Acid Rain Program - Sulfur Dioxide Opt-ins)**

This regulation is not applicable to the Gas Turbine/Generator group (Emission unit # 3) because this unit is an affected unit under 40 CFR 72.6.

III.D. **40 CFR 76 (Acid Rain Nitrogen Oxides Emission Reduction)**

This regulation is not applicable to the Gas Turbine/Generator group (Emission unit # 3) because the turbines are not coal fire units.

Section IV: ACID RAIN PROVISIONS.

IV.A. **Utah Acid Rain Program Authority.**

Authority to implement the Acid Rain Program is contained in R307-417, *Permits: Acid Rain Sources*, and R307-415-6a(4), *Standard permit requirements* [for operating permits].

IV.B. **Permit Requirements.**

IV.B.1 The designated representative of the source and each affected unit at the source shall:

IV.B.1.a Submit a complete Acid Rain permit application (including a compliance plan) under R307-417 and 40 CFR Part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

IV.B.1.b Submit in a timely manner any supplemental information that the Executive Secretary determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

IV.B.2 The owners and operators shall:

IV.B.2.a Operate each affected unit at the source in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Executive Secretary; and

IV.B.2.b Have an Acid Rain Permit.

IV.C. **Sulfur Dioxide Requirements.**

IV.C.1 The owners and operators of each affected unit at the source shall:

IV.C.1.a Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

IV.C.1.b Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

IV.C.2 Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

IV.C.3 An affected unit shall be subject to the requirements under Provision IV.C.1. of the sulfur dioxide requirements as follows:

IV.C.3.a Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

IV.C.3.b Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR 72.6(a)(3).

IV.C.4 Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

IV.C.5 An allowance shall not be deducted in order to comply with the requirements under Provision IV.C.1.a. of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

IV.C.6 An allowance allocated by the Administrator, USEPA, under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

IV.C.7 An allowance allocated by the Administrator, USEPA, under the Acid Rain Program does not constitute a property right.

IV.D. Nitrogen Oxides Requirements.

The owners and operators of the source and each affected unit at the source shall comply with applicable Acid Rain emissions limitation for nitrogen oxides. Both turbines (Acid Permit IDs Unit1 and Unit 2) are currently qualified as Low Mass Emission Unit under 40 CFR 75.19 and are subject to all applicable requirements in 40 CFR 75.19.

IV.E. Monitoring Requirements.

IV.E.1 The owners and operators and, to the extent applicable, designated representative of each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR Parts 74, 75, and 76.

IV.E.2 The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

IV.E.3 The requirements of 40 CFR Parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

IV.F. Recordkeeping and Reporting Requirements.

IV.F.1 Unless otherwise provided, the owners and operators for each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date

the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator, USEPA, or Executive Secretary:

- IV.F.1.a The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
- IV.F.1.b All emissions monitoring information, in accordance with 40 CFR Part 75;
- IV.F.1.c Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
- IV.F.1.d Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- IV.F.2 The designated representative of each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72 Subpart I and 40 CFR Part 75.
- IV.G. **Excess Emissions Requirements.**
- IV.G.1 The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the Administrator, USEPA, as required under 40 CFR Part 77.
- IV.G.2 The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - IV.G.2.a Pay without demand the penalty required, and pay upon demand the interest on that penalty, to the Administrator, USEPA, as required by 40 CFR Part 77; and
 - IV.G.2.b Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.
- IV.H. **Liability.**
- IV.H.1 Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under R307-417, 40 CFR 72.7 or 40 CFR 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- IV.H.2 Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- IV.H.3 No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

- IV.H.4 Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- IV.H.5 Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- IV.H.6 Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not the owners and operators, owners or operators, or the designated representative.
- IV.H.7 Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.
- IV.H.8 The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

IV.I. Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- IV.I.1 Except as expressly provided in Title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative from compliance with any other provision of the Act, including the provisions of Title I of the Act relating to applicable National Ambient Air Quality Standards or the Utah State Implementation Plan;
- IV.I.2 Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- IV.I.3 Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- IV.I.4 Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- IV.I.5 Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

REVIEWER COMMENTS

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN2519009-06

dated August 30, 2006

1. Comment on an item originating in 40 CFR 60.332 (a)(1) & 60.335c) regarding Gas Turbine/Generator group (Unit 3)

NO_x Limitation & Testing Requirement: The NSPS limit for NO_x is 83.1 ppmdv for each turbine. This limit is less stringent than the BACT limit of 14.75 ppmdv and is superseded by the BACT limit. The initial stack tests were performed in May 2003 and have been satisfied with the NSPS Subpart GG testing requirement (40 CFR 60.335(c)). [Comment last updated on 05/25/2007]

2. Comment on an item originating in 40 CFR 75.19 regarding Gas Turbine/Generator group (Unit 3)

LME Units: these units are Low Mass Emission (LME) units under 40 CFR 75.19. EPA made the LME determination in a letter dated January 28, 2003. [Comment last updated on 10/09/2003]

3. Comment on an item originating in DAQE-AN2519008-06 regarding Gas Turbine/Generator group (Unit 3)

Condition 11: this condition is a design requirement and therefore, is not carried into the Title V permit. [Comment last updated on 5/03/2006]

4. Comment on an item originating in the significant modification (2004) regarding Gas Turbine/Generator group (Unit 3)

40 CFR 60 Subpart GG Amendments (7/8/2004): the permittee submitted a copy of Federal Energy Regulatory Commission (FERC) Gas Tariff for Questar on August 25, 2004. Based on the information provided, the amendments are included in this modification as follows:

- 1) Fuel nitrogen monitoring is not required because the fuel-bound nitrogen allowance is not utilized;
- 2) Sulfur monitoring is not required because the gaseous fuel combusted in the turbines meets the definition of natural gas in 40 CFR 60.331(u);
- 3) Reports of excess emissions and monitor downtime are required. [Comment last updated on 9/02/2004]

5. Comment on an item originating in 40 CFR Subpart Dc regarding Auxiliary Boiler (Unit 5)

fuel monitoring: Daily fuel monitoring required by 40 CFR 60.48c(g) is reduced to monthly since the potential SO₂ emission from natural gas combustion is about 0.001 lb/mmBTU [Comment last updated on 10/25/2006]

6. Comment on source-wide regarding Title V permit dated on May 25, 2007

Changes made in the permit:

Provision II.A: Emission Unit #4 from the previous permit is removed. New Emission Units #4, 5, 6, 7, and 8 are added.

Provision II.B.

II.B.1.c.: New condition

II.B.2.a: NO_x limit is reduced from 15 ppm_{dv} to 14.75 ppm_{dv}

II.B.2.d is removed and replaced by II.B.1.c

II.B.3, II.B.4, and II.B.5: New conditions. [Comment last updated on 5/25/2007]